ARE HUMAN BEINGS LOSING FOUR SENSES?

BEAST AND BIRD SURPASS US IN ALL BUT THOUGHT.

Reason Is Crowding Out Ability to See, to Hear, to Smell.

As the brain of the human race grows in complexity, its simpler functions are gradually being lost.

Sight, taste, smell, hearing—all the original senses are bidding man good by, to make way for an over-trained, over-strained and over-developed machinery of thought. And the brain shows it.

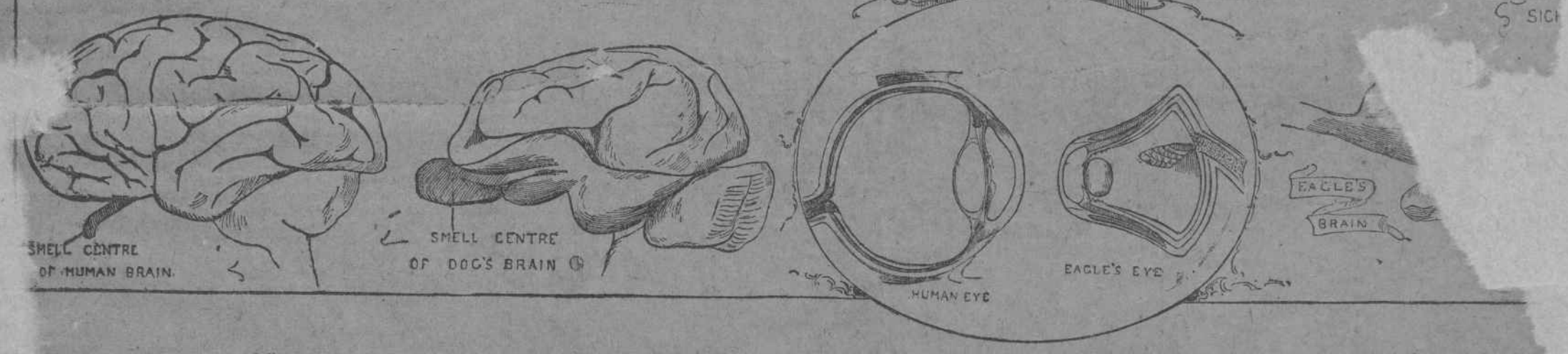
Man's head has become what Bill Nye called "merely a think tank." Man understands more things now than he used to; devises more apparatus for the overcoming of natural forces. He thinks a lot. He has found out just how sound waves progress from volcanic eruptions. He can photograph sound. He has played high jinks in the universe with electricity. With his brains, and the fingers which are the brain's servants, he has invented machinery to make naught of weight, to annihilate time, and to laugh at distance.

He is a wonderful thing—man, so brainy that by and by nothing save an insane asylum or a well bricked up grave will hold him. But he cannot see. He cannot catch a scent as a dog does. The carrier pigeon is a marvel to him. How the trained pointer sniffs the birds far ahead and stops, with his fine nose tilted forward, one foot aloft, and tail in line like a signal, is beyond the logician's comprehension. Why cannot man do it?

It is because man's head is only a sanctuary of thought. He is growing further away from nature and natural functions every day. His nose is a facial ornament. His ears are signs for physiognomists to read his character by. The house cat hears the mouse squeaking its infinitesimally fine note inside a wall.

To all this man is dead. He has neglected his natural senses. He has turned his brain forces over, one and all, to thought. And as generation follows generation, he is losing his senses. In a comparatively little while he will have no smell, no sight, no hearing. Taste and

BY AN ARRANGEMENT LIKE THIS SOUND CAN BE SENT TO THE BRAIN WITHOUT



SHOWING WHY THE DOG SURPASSES MAN IN SENSE OF SMELL, AND THE

may retain longer. One contributes enjoyment. The other he needs in business. But the old five senses, he had in prehistoric times, are declining. Comparison of the human with the brains of animals noted for excellence of these senses tells the story with a positiveness which defies at contradiction.

Take, for example, the matter of sight. Here, to make the thing plain, are pictures of two eyes. One is the eye of the average man as he turns it upon his average everyday business. The other is the eye of the eagle, which perhaps has as good general eyesight as any creature that breathes. This eye of the eagle, science says, has sight more far reaching, more minute and quicker even, than the photographic camera.

It takes no scientist to see that the retinal surface, that broad expanse at the back, which receives the vision and transmits it to the brain, is much wider in the eye of the eagle than in that of man. It permits a more extensive array of what science calls the end-organs of sight. Then, what affords fineness of vision is the cornea—the outer and rounded surface. See how it is flattened in the human eye.

It was not always so. Man had as good, full rounded eyes, in the early ages of his residence on this earth, as any eagle of them all. But that was before he began

With blinded eyesight poring
Over miserable books.

The sense of smell has, in the human being, dwindled in no smaller degree. Smell was arrested in the dog. In man it is going the way of all the other senses. It is crowded out by thought. Look at the brain of the dog and that of the human. The story of their kinship is told there with tolerable plainness. But how about smell? There is a tiny protuberance, which looks like the fag end of a nerve, or tendon, depending from the forward under side of the human brain.

That is the olfactory. In the brain of the dog this same organ, developed to inordinate size, lies in the very forefront of the brain. That is why the field dog points his game. And the connection by fibres between the hair cells of smell in the pointer's nose and these olfactory lobes has been shown by Cajal, the Spanish physiological psychologist, to be direct. A dog has movable nostrils, and so collects and focuses upon his brain all the scents that are abroad on the breeze.

He hunts in dreams. His nostrils dilate. He thinks in odors, as the eagle thinks in sight. That almost farcical statement is made plain and reasonable by a single glance at the pictures of the eagle's brain. Well nigh the whole brain development of the eagle is comprised in two simple lobes. The forward lobe is merely an exaggerated sight centre. The posterior lobe, the cerebellum, is vastly enlarged by the bird's exercise in poising in flight. Sight and equilibrium constitute almost the whole mental development. It is in these that he thinks.

The whole brain, in the fish, as shown in the illustration, is a sight centre. The same truths are clear in the lower animals in the matter of hearing. The cat and dog have far finer auditory sensibilities than man. The whole ear structure of animals is constructed for the condensation of sound. Their wide ears gather together and concentrate sound. Pitch is lowered by intensity. Cats and dogs hear sounds inaudible to human beings, not because the gamut of their end organs—called organs of Corti—in the internal ear is greater, but because by the widespread external ear a greater volume of a higher rate of vibrations is secured, which lowers both rapidity and pitch.

SUICIDE OF TARANTULAS.

Walter Ralston, a snake expert, who is collecting live specimens for the Smithsonian Institute, recently passed through Cincinnati on his way to the Florida Everglades, where he will spend the Winter. He carried a large collection of snakes and other reptiles with him.

"I have been fanged about 200 times, all told," said he to a reporter, "but I don't mind a snake bite any more, I know the antidote for every one of them, and carry a private dispensary of my own right along with me.

"About the worst citizen I have to deal with in my line is the tarantula, but I will cheerfully give $500 for one that I can't get on intimate terms with in five minutes."

Then Ralston exhibited a regular little tarantula hotel, where about twenty of the burliest looking specimens of this deadly spider were lodged. In the little long box each one has a separate room, as they are such confirmed cannibals that they would soon consume each other if left together. It seems this bad habit of the tarantula is about the only one they will not give up.

"By the way," the snake collector continued, "I believe that this very insect was the originator of suicide. I can't keep them very long. They won't stand confinement, and invariably, as a last resort in their distress, turn upon and sting themselves to death. For all that I can learn they were 'doing this turn' long before Adam knew what trouble was.

"It is a very easy matter for a tarantula to kill himself and escape his wretchedness. The last joint of his legs is black. There is a prong on the end of it, and the poison is stored just above in this last joint. He stabs himself with one of these prongs and inserts the poison through it. Death is the instant result."

Ralston wears a coat of rattlesnake hides, and over it his troupe of reptiles twine themselves.

"It is a sin to kill snakes," continued the snake man, as he held a copperhead up to his cheek and allowed it to coil itself across his eyes. "Every drop of poison they carry is more valuable than gold or precious stones when its uses are understood.

"The time will come when they will be defended by the law, and sacred to the makers of medicine. There are many snakes in California which are already protected for the good they do in destroying certain rodents. I believe they all serve a purpose.

DOCTORS CAN NOW PREVENT CHILDREN FROM BE

To lace up a man's spine so as to straighten out the curvatures or reduce the spinal protuberance known as humpback, is the surprising accomplishment of Dr. Andre Chipaults, a celebrated surgeon of France.

It requires no scientific knowledge to appreciate the wonderful character of an operation which thus conquers the deformities of nature and disease. It is an operation that borders on the miraculous and puts to shame any of the marvellous physical transformations achieved at Lourdes with religious zeal and faith as the inspiring agency.

Spine operations have ever been regarded as the most difficult because the most delicate. The spinal region, interwoven with an intricate network of nerves, is the centre of the human nervous system, and it is correlated by the same system of nerve fibres and nerve cells with the brain and the whole cerebral organization. You can kill a man with a needle simply by introducing it in a certain part of the spinal region, and the most insufferable agony has been known to result from a slight jar or strain to the nerve centres thereabout. The spinal cord, which is really the base of all the manhood and all the power of the human frame, has been held to be the one spot to be avoided by the surgeon's knife, for to sever it is certain death. Now, however, modern surgery, that stops at nothing when there is an opportunity to benefit suffering mankind, has found a way of making the crooked spine straight, and of correcting spinal deformities.

Think of literally lacing up the human backbone just as a woman moulds her form to a corset's shape by pulling on the strings! The strings in the hands of the surgeon are of silver, and they are deeply interlaced with the vertebrae, tightened and, lo! the back is straightened.

This scientific method of treating the spine by wiring the [illegible] proceeds [illegible] as follows: The spine [illegible] that [illegible]